

Claims:

1. (Currently Amended) ~~In combination a~~ shifter base housing, shift rod assembly disposed within a passenger compartment of an automotive vehicle mounting a shift lever used to operate a vehicle drive unit with an and operator cable and a cable connector integrated with a base housing included in said shifter housing assembly, assembly, said combination assembly comprising:

an operator cable having an outer case containing a movable wire core;
a shifter base housing defining an interior space;
a generally cylindrical ~~an opening integrally defined in~~ extending through ~~a wall of~~ said shifter base housing ~~of~~ said shifter housing assembly ~~extending~~ and ~~into~~ an said interior space ~~defined in~~ said base housing;

~~a sleeve having one end extending into said generally cylindrical opening, said sleeve having said operator cable secured to a protruding~~ within ~~an~~ other end of said sleeve;

~~said sleeve having an elastomeric isolator~~ isolator-seal substantially enclosing said one end of said sleeve, ~~said isolator~~ isolator-seal received in said generally cylindrical opening and compressed against one or more surfaces defined therein to seal said sleeve one end to said shifter base housing;

~~said operating~~ said operator cable including a core wire movable in an outer case, ~~said outer case secured within~~ said protruding other end of said sleeve, ~~said core wire extending completely through~~ an opening in said sleeve ~~and~~ said isolator ~~to pass into~~ said base housing interior space; and

a shift rod extending across said interior space and attached at one end to said cable core wire, said shift rod completely underlain by said shifter base housing.

2. (Currently Amended) The combination assembly according to claim 1 wherein said generally cylindrical opening is formed in a generally cylindrical protrusion integrally formed on said shifter base housing, and said isolator isolator-seal is held in said opening by a cap held on an end of said protrusion.

3. (Currently Amended) The combination assembly according to claim 2 wherein said cap has one or more features snap fit over a feature on said protrusion.

4. (Currently Amended) The combination assembly according to claim 2 wherein said cap has an opening within which said sleeve protrudes in extending into said generally cylindrical opening.

5. (Currently Amended) The combination assembly according to claim 4 wherein said isolator isolator-seal has a reduced diameter end which protrudes out through said cap opening.

6. (Currently Amended) The combination assembly according to claim 1 further including a tubular plastic insert in said sleeve said one end inserted within said generally cylindrical opening, said cable core wire passing through said tubular plastic insert.

7. (Currently Amended) The combination assembly according to claim 6 wherein said tubular plastic insert has a flange extending radially out and abutting said one end of said sleeve.

8. (Currently Amended) The combination assembly according to claim 1 wherein said sleeve has a flange formed therein extending out into surrounding portions of said ~~isolator~~ isolator-seal.

9. (Currently Amended) The combination assembly according to claim 1 wherein said shifter base housing has a partially spherical seat formed therein aligned with said generally cylindrical opening and located inwardly therefrom, and having a central opening receiving said cable wire core passed through said sleeve, said seat facing back towards said sleeve.

10. (Currently Amended) The combination assembly according to claim 9 further including a swivel tube having a ball head resting in said seat and a tubular body extending through said central opening into said interior space of said shifter base housing, said cable wire core extending through an opening in said head and within said tubular body.

11. (Currently Amended) The combination assembly according to claim 10 wherein said ~~isolator~~ isolator-seal has an inner end formed with a partially spherical seat facing said partially spherical seat formed in said shifter base housing, said swivel tube ball head captured therebetween so as to accommodate tilting of said swivel tube.

12. (Currently Amended) The combination assembly according to claim 11 further including a ~~wherein said shift rod is~~ slidable in said swivel tube body and having one end

~~affixed to said cable wire core.~~

13. (Currently Amended) The combination assembly according to claim 11 wherein said shifter base housing has an integrally formed tubular projection aligned with said generally cylindrical opening and extending into said interior space within said shifter base housing and formed with a partially spherical seat of said shifter base housing, and said swivel tube extending within said tubular projection.

14. (Currently Amended) The combination assembly according to claim 13 wherein said tubular projection has outwardly flaring inner wall allowing tilt of said swivel tube, and said swivel tube has a reduced diameter land adjacent to said ball head.

15. (Currently Amended) The combination assembly according to claim 1, wherein said sleeve is constructed of steel, said sleeve crimped to said operator cable case.

16. (Currently Amended) A method of assembling an operator cable having an outer case and an inner core wire movable therein to a shifter base housing assembly mounting and a shift lever rod connected to said inner core wire for operating an automotive drive unit from within a passenger compartment of an automotive vehicle, said shifter housing assembly including a base housing, said shifter base housing defining an interior space closed with a cover, said method comprising:

integrally forming a generally cylindrical an opening in through a wall of said shifter base housing extending into said interior space;

substantially enclosing one end of a sleeve with an elastomeric isolator isolator-

seal;

partially extending inserting said one end of said sleeve and isolator isolator-seal into said generally cylindrical opening;

compressing and holding said isolator isolator-seal against one or more surfaces in said cylindrical opening to cause said sleeve one end to be sealed thereto to said shifter base housing;

passing said operator cable into a protruding an opposite end of said sleeve and fixing said outer case within said protruding opposite end of said sleeve; and

extending a protruding end of said inner core wire through said sleeve and isolator and into an said interior space of said shifter base housing member; and,

attaching said inner core wire to one end of said shift rod, said shift rod extending from said core wire across said interior space, said shift rod completely underlain by said shifter housing base.

17. (Currently Amended) The method according to claim 16 wherein said isolator isolator-seal is compressed against said one or more shoulders in said generally cylindrical opening by installing a cap of against protruding an end of said isolator isolator-seal and locking said cap to a protrusion formed on said shifter base housing.

18. (Currently Amended) The method according to claim 16 further including forming a partially spherical seat aligned with said generally cylindrical opening on an inner portion of said shifter base housing, said seat having a concentric opening, passing a body of a swivel tube through said concentric opening to bring a partially spherical head portion on an end

of said swivel tube into abutment with said seat, forming a partially spherical seat on an end of said ~~isolator~~ isolator-seal facing said seat formed on said shifter base housing inner portion and forced against said head of said swivel tube, and extending said cable core wire through an opening in said isolator seat and swivel tube head, and into said swivel tube.

19. (Original) The method according to claim 16 further including installing a tubular plastic insert into a portion of the length of an inner passage in said sleeve and passing said cable wire core through an opening extending along said tubular plastic insert.

20. (Original) The method according to claim 17 wherein said cap is locked to said protrusion by snap fitting a feature formed on said cap to a feature formed on said protrusion.

21. (Currently Amended) The method according to claim 19 further including forming a flange on said insert and also on a portion of said sleeve enclosed in said ~~isolator~~ isolator-seal acting to compress said ~~isolator~~ isolator-seal when said cable is operated.

22. (Currently Amended) The method according to claim 18 further including attaching said cable core wire to said one end of a rod, and inserting one end of said shift rod into said swivel tube and slidably fit fitting said shift rod therein.